

## **AMENDMENTS TO THE CLAIMS**

**Please amend the claims as follows:**

1 9 (Currently Amended) A computer-implemented method for combining at  
2 least two overlapping layers to render an image, the image containing a plurality of  
3 image pixels, each overlapping layer containing a plurality of layer pixels, each layer  
4 pixel corresponding to one of the image pixels, wherein each layer pixel has an opac-  
5 ity value and wherein at least one of the overlapping layers has a fade value that  
6 specifies an overall opacity of the at least one of the overlapping layers, the method  
7 comprising:

8 a') defining a tile, the tile comprising a subset of the image pixels  
9 delimited according to an area of overlap among a set of at least  
10 two layers, so that a first portion of the image lies within the tile  
11 and a second portion of the image lies outside the tile; and

12                   a) processing the first portion of the image distinctly from the sec-  
13                   ond portion of the image by, for at least one image pixel in the  
14                   defined tile:

15 a.1) initializing an accumulator color value and an accumula-  
16 tor opacity value;

17 a.2) selecting one of the layers in the set of at least two layers,  
18 the selected layer having a layer pixel corresponding to  
19 the image pixel, the layer pixel having a color value;  
20 a.3) compositing the color value of the layer pixel with the ac-  
21 cumulator color value, and compositing at least one of the  
22 opacity value of the layer pixel and the fade value of the  
23 selected layer with the accumulator opacity value;  
24 a.4) storing ~~the result of a.3)~~ in the accumulator color value  
25 and the accumulator opacity value resulting from a.3);  
26 a.5) determining whether layer pixels for any remaining lay-  
27 ers in the set of at least two layers should be processed;  
28 a.6) responsive to a.5) indicating that layer pixels for any re-  
29 maining layers should be processed, repeating a.2) to a.6);  
30 and  
31 a.7) outputting the accumulator color value;  
32 wherein, for each defined tile, the set of layers that overlap within the  
33 tile is homogenous throughout the entirety of the tile.

1 2. (Currently Amended) The method of claim 1, wherein each layer pixel has  
2 an opacity value, and wherein:  
3 a.1) further comprises initializing an accumulator opacity value;  
4 a.3) further comprises compositing the opacity value of the layer pixel  
5 with the accumulator opacity value; and

6 a.5) comprises determining whether the accumulator opacity value indicates full  
7 opacity.

1 3. (Original) The method of claim 1, wherein a.2) comprises selecting a top-  
2 most remaining layer in the set of at least two layers.

1 4. (Currently Amended) The method of claim 1, wherein a.7) comprises  
2 outputting the accumulator color value to a frame buffer.

1 5. (Original) The method of claim 1, further comprising:  
2 b) displaying the image.

1 6. (Original) The method of claim 1, further comprising:  
2 b) repeating a) for each image pixel in the defined tile.

1 7. (Original) The method of claim 1, wherein a) comprises performing a.1)  
2 through a.7) for at least two image pixels concurrently.

1 8. (Currently Amended) The method of claim 1, further comprising:  
2 b) concurrently with a), for a second image pixel in the defined tile:  
3 b.1) initializing a second accumulator color value;  
4 b.2) selecting one of the layers in the set of at least two layers, the se-  
5 lected layer having a second layer pixel corresponding to the  
6 second image pixel, the second layer pixel having a color value;

7                   b.3) compositing the color value of the second layer pixel with the  
8                   second accumulator color value;  
9                   b.4) storing ~~the result of b.3)~~ in the second accumulator color value  
10                   resulting from b.3);  
11                   b.5) determining whether layer pixels for any remaining layers in the  
12                   set of at least two layers should be processed;  
13                   b.6) responsive to b.5) indicating that layer pixels for any remaining  
14                   layers should be processed, repeating b.2) to b.6); and  
15                   b.7) outputting the second accumulator color value.

1                   9. (Original) The method of claim 1, wherein at least one of the layers in the  
2                   set of at least two layers is non-rectangular.

1                   10. (Currently amended) The method of claim 1, wherein at least one pixel of  
2                   at least one of the layers in the set of at least two layers is transparent, and wherein  
3                   compositing the color value of the layer pixel with the accumulator color value in a.3)  
4                   comprises:

5                   a.3.1) responsive to the layer pixel being transparent, retaining the ac-  
6                   cumulator color value; and  
7                   a.3.2) responsive to the layer pixel not being transparent, compositing  
8                   the color value of the layer pixel with the accumulator color  
9                   value.

1                   11. (Original) The method of claim 1, further comprising:

2 b') repeating a') and a) for at least one second defined tile.

1 12. (Original) The method of claim 1, wherein each layer comprises a win-  
2 dow, and wherein the image comprises a display for a windowing system.

1 13. (Original) The method of claim 1, wherein a first one of the layers in the  
2 set overlaps a second one of the layers in the set, and wherein each layer comprises  
3 bounds defined by edges, and wherein at least one edge of the first layer lies within  
4 the bounds of the second layer, and wherein a') comprises:

5 subdividing the second layer along a line corresponding to an exten-  
6 sion of the at least one edge of the first layer that lies within the  
7 bounds of the second layer.

1 14. (Currently Amended) The method of claim 1, wherein[:]  
2 a.2) ~~comprises selecting one of the layers in the set of at least two layers,~~  
3 ~~the selected layer having a layer pixel corresponding to the im-~~  
4 ~~age pixel, the layer pixel having a color value and an alpha-~~  
5 ~~value; and~~  
6 a.3) comprises compositing the color value of the layer pixel with the accumulator  
7 color value, ~~using the alpha value using at least one of the opacity value of the layer~~  
8 ~~pixel, the fade value of the selected layer and the accumulator opacity value.~~

1 15. (Currently Amended) A system for combining at least two overlapping  
2 layers to render an image, the image containing a plurality of image pixels, each

3       overlapping layer containing a plurality of layer pixels, each layer pixel correspond-  
4       ing to one of the image pixels, wherein each layer pixel has an opacity value and  
5       wherein at least one of the overlapping layers has a fade value that specifies an over-  
6       all opacity of the at least one of the overlapping layers, the system comprising:  
7               a tile subdivider, for defining a tile, the tile comprising a subset of the  
8               image pixels delimited according to an area of overlap among a  
9               set of at least two layers, so that a first portion of the image lies  
10              within the tile and a second portion of the image lies outside the  
11              tile;  
12              an accumulator one or more accumulators, for initializing an accumula-  
13              tor color value and an accumulator opacity value for at least one  
14              image pixel in the defined tile;  
15              a layer selector, coupled to the tile subdivider, for successively selecting  
16              each of at least a subset of the layers in the set of at least two lay-  
17              ers, each selected layer having a layer pixel corresponding to the  
18              image pixel, the layer pixel having a color value;  
19              a compositor coupled to the layer selector and to the one or more ae-  
20              cumulator accumulators, for, for each successively selected layer,  
21              compositing the color value of the layer pixel with the accumula-  
22              tor color value, and compositing at least one of the opacity value  
23              of the layer pixel and the fade value of the selected layer with the  
24              accumulator opacity value, and storing the result results in the  
25              accumulator one or more accumulators; and

26 an output device, coupled to the one or more accumulator accumula-  
27 tors, for outputting the accumulator color value;  
28 wherein in combining the overlapping layers, the one or more accumu-  
29 lators accumulators, the layer selector, and the compositor proce-  
30 ssess the first portion of the image distinctly from the second por-  
31 tion of the image;  
32 wherein, for each defined tile, the set of layers that overlap within the  
33 tile is homogenous throughout the entirety of the tile.

1 16. (Currently Amended) The system of claim 15, wherein ~~each layer pixel~~  
2 ~~has an opacity value, and wherein:~~  
3 ~~the accumulator further initializes an accumulator opacity value;~~  
4 ~~the compositor further composites the opacity value of the layer pixel~~  
5 ~~with the accumulator opacity value and stores the result in the~~  
6 ~~accumulator; and~~  
7 the subset of overlapping layers selected by the layer selector is determined respon-  
8 sive to a comparison of the accumulator opacity value with a full opacity value.

1 17. (Original) The system of claim 15, wherein the layer selector successively  
2 selects layers by selecting a topmost remaining layer in the set of at least two layers.

1 18. (Currently Amended) The system of claim 15, wherein the output device  
2 outputs the accumulator color value to a frame buffer.

1        19. (Original) The system of claim 15, further comprising a display device,  
2        coupled to the output device, for displaying the image.

1        20. (Currently Amended) The system of claim 15, wherein each of the layer  
2        selector, compositor, ~~accumulator~~ one or more accumulators, and output device op-  
3        erates on each image pixel in the defined tile.

1        21. (Currently Amended) The system of claim 15, wherein the layer selector,  
2        compositor, ~~accumulator~~ one or more accumulators, and output device each operate  
3        on at least two image pixels concurrently.

1        22. (Currently Amended) The system of claim 15, ~~further comprising a sec-~~  
2        ~~ond accumulator, coupled to the compositor~~, wherein:  
3                ~~the second accumulator initializes~~ one of the one or more accumulators  
4                initializes a second accumulator color value for a second image  
5                pixel in the defined tile;  
6                the layer selector, concurrently with successively selecting each of at  
7                least a subset of the layers in the set of at least two layers having  
8                a layer pixel corresponding to the first image pixel, selects one of  
9                the layers in the set of at least two layers having a second layer  
10               pixel corresponding to the second image pixel, the second layer  
11               pixel having a color value;

12 the compositor, concurrently with compositing the first color value of  
13 the layer pixel with the accumulator color value, composites the  
14 color value of the second layer pixel with the second ac-  
15 cumulator color value and stores the result in the ~~second ac-~~  
16 ~~cumulator~~ one of the one or more accumulators; and  
17 the output device outputs the second accumulator color value.

1 23. (Original) The system of claim 15, wherein at least one of the layers in the  
2 set of at least two layers is non-rectangular.

1 24. (Original) The system of claim 15, wherein at least one pixel of at least one

2 of the layers in the set of at least two layers is transparent, and wherein the composi-  
3 tor:

4 responsive to the layer pixel being transparent, retains the accumulator  
5 color value; and

6 responsive to the layer pixel not being transparent, composites the color  
7 value of the layer pixel with the accumulator color value.

1 25. (Currently Amended) The system of claim 15, wherein:

2 the tile subdivider defines as a second tile a second area of overlap be-  
3 tween a second set of at least two layers, the tile comprising a  
4 second subset of the image pixels;

5 the accumulator one of the one or more accumulators initializes a sec-  
6 ond accumulator color value for at least one image pixel in the  
7 second defined tile;  
8 the layer selector successively selects each of at least a subset of the lay-  
9 ers in the second set of at least two layers, each selected layer  
10 having a layer pixel corresponding to the image pixel, the layer  
11 pixel having a color value;  
12 the compositor, for each successively selected layer, composites the  
13 color value of the layer pixel with the second accumulator color  
14 value and stores the result in the accumulator one of the one or  
15 more accumulators; and  
16 the output device outputs the second accumulator color value.

1        26. (Original) The system of claim 15, wherein each layer comprises a window  
2        and wherein the image comprises a display for a windowing system.

1        27. (Original) The system of claim 15, wherein a first one of the layers in the  
2 set overlaps a second one of the layers in the set, and wherein each layer comprises  
3 bounds defined by edges, and wherein at least one edge of the first layer lies within  
4 the bounds of the second layer, and wherein the tile subdivider subdivides the sec-  
5 ond layer along a line corresponding to an extension of the at least one edge of the  
6 first layer that lies within the bounds of the second layer.

<sup>1</sup> 28. (Currently Amended) The system of claim 15, wherein [::]

2 the layer selector successively selects each of at least a subset of the lay-  
3 ers in the set of at least two layers, each selected layer having a  
4 layer pixel corresponding to the image pixel, the layer pixel hav-  
5 ing a color value and an alpha value; and  
6 the compositor composites the color value of the layer pixel with the accumulator  
7 color value, using the alpha value using at least one of the opacity value of the layer  
8 pixel, the fade value of the selected layer and the accumulator opacity value.

1 29. (Currently Amended) A computer program product comprising a com-  
2 puter-usable medium having computer-readable code embodied therein for combin-  
3 ing at least two overlapping layers to render an image, the image containing a plu-  
4 rality of image pixels, each overlapping layer containing a plurality of layer pixels,  
5 each layer pixel corresponding to one of the image pixels, wherein each layer pixel  
6 has an opacity value and wherein at least one of the overlapping layers has a fade  
7 value that specifies an overall opacity of the at least one of the overlapping layers, the  
8 computer program product comprising:

9 computer-readable program code devices configured to cause a com-  
10 puter to define a tile, the tile comprising a subset of the image  
11 pixels delimited according to an area of overlap among a set of  
12 at least two layers, so that a first portion of the image lies within  
13 the tile and a second portion of the image lies outside the tile;  
14 and

15 computer-readable program code devices configured to cause a com-  
16 puter to process the first portion of the image distinctly from the  
17 second portion of the image by, for at least one image pixel in  
18 the defined tile:  
19 initializing an accumulator color value and an accumulator  
20 opacity value;  
21 selecting one of the layers in the set of at least two layers, the se-  
22 lected layer having a layer pixel corresponding to the im-  
23 age pixel, the layer pixel having a color value;  
24 compositing the color value of the layer pixel with the accu-  
25 mulator color value, and compositing at least one of the  
26 opacity value of the layer pixel and the fade value of the  
27 selected layer with the accumulator opacity value;  
28 storing the result of the compositing in the accumulator color  
29 value and the accumulator opacity value resulting from  
30 the compositing;  
31 determining whether layer pixels for any remaining layers in the  
32 set of at least two layers should be processed;  
33 responsive to the determination indicating that layer pixels for  
34 any remaining layers should be processed, repeating the  
35 initializing, selecting, compositing, storing, and determin-  
36 ing steps; and  
37 outputting the accumulator color value;

38 wherein, for each defined tile, the set of layers that overlap within the  
39 tile is homogenous throughout the entirety of the tile.

1 30. (Currently Amended) The computer program product of claim 29,  
2 wherein each layer pixel has an opacity value, and wherein:  
3 the computer readable program code devices configured to cause a  
4 computer to initialize further comprise computer readable pro-  
5 gram code devices configured to cause a computer to initialize  
6 an accumulator opacity value;  
7 the computer readable program code devices configured to cause a  
8 computer to composite further comprise computer readable  
9 program code devices configured to cause a computer to com-  
10 posite the opacity value of the layer pixel with the accumulator  
11 opacity value; and  
12 the computer-readable program code devices configured to cause a computer to de-  
13 termine whether layer pixels for any remaining layers should be processed comprise  
14 computer-readable program code devices configured to cause a computer to deter-  
15 mine whether the accumulator opacity value indicates full opacity.

1 31. (Original) The computer program product of claim 29, wherein the com-  
2 puter-readable program code devices configured to cause a computer to select one of  
3 the layers comprise computer-readable program code devices configured to cause a  
4 computer to select a topmost remaining layer in the set of at least two layers.

1 32. (Currently Amended) The computer program product of claim 29,  
2 wherein the computer-readable program code devices configured to cause a com-  
3 puter to output the accumulator color value comprise computer-readable program  
4 code devices configured to cause a computer to output the accumulator color value  
5 to a frame buffer.

1                   33. (Original) The computer program product of claim 29, further comprising:  
2

3 computer-readable program code devices configured to cause a com-  
4 puter to display the image.

1                   34. (Original) The computer program product of claim 29, further comprising:  
2

3 computer-readable program code devices configured to cause a com-  
4 puter to repeat the initializing, selecting, compositing, storing,  
5 determining, and outputting for each image pixel in the defined  
6 tile.

1 35. (Original) The computer program product of claim 29, wherein the com-  
2 puter-readable program code devices are configured to cause a computer to perform  
3 the initializing, selecting, compositing, storing, and outputting for at least two image  
4 pixels concurrently.

1 36. (Currently Amended) The computer program product of claim 29, further  
2 comprising:

3 computer-readable program code devices configured to cause a com-  
4 puter to, for a second image pixel in the defined tile and concur-  
5 rently with the selecting, compositing, storing, and outputting  
6 for the first image pixel:

7 initialize a second accumulator color value;  
8 select one of the layers in the set of at least two layers, the se-  
9 lected layer having a second layer pixel corresponding to  
10 the second image pixel, the second layer pixel having a  
11 color value;

12 composite the color value of the second layer pixel with the sec-  
13 ond accumulator color value;

14 store ~~the result of the compositing in~~ the second accumulator  
15 color value resulting from the compositing;

16 determine whether layer pixels for any remaining layers in the  
17 set of at least two layers should be processed;

18 responsive to the determination indicating that layer pixels for  
19 any remaining layers should be processed, repeat the ini-  
20 tializing, selecting, compositing, storing, and determining  
21 steps; and

22 output the second accumulator color value.

1       37. (Original) The computer program product of claim 29, wherein at least  
2       one of the layers in the set of at least two layers is non-rectangular.

1       38. (Original) The computer program product of claim 29, wherein at least  
2       one pixel of at least one of the layers in the set of at least two layers is transparent,  
3       and wherein the computer-readable program code devices configured to cause a  
4       computer to composite the color value of the layer pixel with the accumulator color  
5       value comprise computer-readable program code devices configured to cause a com-  
6       puter to:

7                   responsive to the layer pixel being transparent, retain the accumulator  
8                   color value; and  
9                   responsive to the layer pixel not being transparent, composite the color  
10                  value of the layer pixel with the accumulator color value.

1       39. (Original) The computer program product of claim 29, further com-  
2       prising:  
3                   computer-readable program code devices configured to cause a com-  
4                   puter to define as a second tile an area of overlap between a set  
5                   of at least two layers, the second tile comprising a second subset  
6                   of the image pixels; and  
7                   computer-readable program code devices configured to cause a com-  
8                   puter to repeat the initializing an accumulator color value, select-

9 ing one of the layers, compositing, storing, repeating, and out-  
10 putting, for the second defined tile.

1 40. (Original) The computer program product of claim 29, wherein each layer  
2 comprises a window, and wherein the image comprises a display for a windowing  
3 system.

1        41. (Original) The computer program product of claim 29, wherein a first one  
2        of the layers in the set overlaps a second one of the layers in the set, and wherein  
3        each layer comprises bounds defined by edges, and wherein at least one edge of the  
4        first layer lies within the bounds of the second layer, and wherein the computer-  
5        readable program code devices configured to cause a computer to define as a tile an  
6        area of overlap comprises:

7 computer-readable program code devices configured to cause a com-  
8 puter to subdivide the second layer along a line corresponding  
9 to an extension of the at least one edge of the first layer that lies  
10 within the bounds of the second layer.

1 42. (Currently Amended) The computer program product of claim 29,  
2 wherein:  
3 the computer-readable program code devices configured to cause a  
4 computer to select one of the layers comprise computer-readable  
5 program code devices configured to cause a computer to select  
6 one of the layers in the set of at least two layers, the selected



15 layer selecting means, for successively selecting each of at least a subset  
16 of the layers in the set of at least two layers, each selected layer  
17 having a layer pixel corresponding to the image pixel, the layer  
18 pixel having a color value;  
19 compositing means, coupled to the layer selecting means and to the ac-  
20 cumulating means, for, for each successively selected layer,  
21 compositing the color value of the layer pixel with the ac-  
22 cumulator color value, and compositing at least one of the opac-  
23 ity value of the layer pixel and the fade value of the selected  
24 layer with the accumulator opacity value, and storing the result  
25 results in the accumulating means; and  
26 output means, coupled to the accumulating means, for outputting the  
27 accumulator color value;  
28 wherein in combining the overlapping layers, the accumulating means,  
29 the layer selecting means, and the compositing means process  
30 the first portion of the image distinctly from the second portion  
31 of the image;  
32 wherein, for each defined tile, the set of layers that overlap within the  
33 tile is homogenous throughout the entirety of the tile.

1 44. (Currently Amended) The system of claim 43, wherein each layer pixel  
2 ~~has an opacity value, and wherein:~~

3 the accumulating means further initializes an accumulator opacity  
4 value;  
5 the compositing means further composites the opacity value of the  
6 layer pixel with the accumulator opacity value and stores the re-  
7 sult in the accumulating means; and  
8 the subset of overlapping layers selected by the layer selecting means is determined  
9 responsive to a comparison of the accumulator opacity value with a full opacity  
10 value;

1        45. (Original) The system of claim 43, wherein the layer selecting means suc-  
2        cessively selects layers by selecting a topmost remaining layer in the set of at least  
3        two layers.

1        46. (Currently Amended) The system of claim 43, wherein the output means  
2        outputs the accumulator color value to a frame buffer.

1        47. (Original) The system of claim 43, further comprising display means, cou-  
2        pled to the output means, for displaying the image.

1        48. (Original) The system of claim 43, wherein each of the layer selecting  
2        means, compositing means, accumulating means, and output means operates on  
3        each image pixel in the defined tile.

1        49. (Original) The system of claim 43, wherein each of the layer selecting  
2        means, compositing means, accumulating means, and output means operates on at  
3        least two image pixels concurrently.

1        50. (Currently Amended) The system of claim 43, ~~further comprising a sec-~~  
2        ~~ond accumulating means, coupled to the compositing means, for initializing wherein~~  
3        the accumulating means initializes a second accumulator color value for a second  
4        image pixel in the defined tile, and wherein:

5                the layer selecting means, concurrently with successively selecting each  
6                of at least a subset of the layers in the set of at least two layers  
7                having a layer pixel corresponding to the first image pixel, se-  
8                lects one of the layers in the set of at least two layers having a  
9                second layer pixel corresponding to the second image pixel, the  
10               second layer pixel having a color value;  
11               the compositing means, concurrently with compositing the first color  
12               value of the layer pixel with the accumulator color value, com-  
13               posites the color value of the second layer pixel with the second  
14               accumulator color value and stores the result in the ~~second~~ ac-  
15               cumulating means; and  
16               the output means outputs the second accumulator color value.

1        51. (Original) The system of claim 43, wherein at least one of the layers in the  
2        set of at least two layers is non-rectangular.

1       52. (Original) The system of claim 43, wherein at least one pixel of at least one  
2       of the layers in the set of at least two layers is transparent, and wherein the composit-  
3       ing means:

4                   responsive to the layer pixel being transparent, retains the accumulator  
5                   color value; and

6                   responsive to the layer pixel not being transparent, composites the color  
7                   value of the layer pixel with the accumulator color value.

1       53. (Currently Amended) The system of claim 43, wherein:

2                   the tile subdividing means defines as a second tile a second area of  
3                   overlap between a second set of at least two layers, the tile com-  
4                   prising a second subset of the image pixels;

5                   the accumulating means initializes a second accumulator color value  
6                   for at least one image pixel in the second defined tile;

7                   the layer selecting means successively selects each of at least a subset of  
8                   the layers in the second set of at least two layers, each selected  
9                   layer having a layer pixel corresponding to the image pixel, the  
10                  layer pixel having a color value;

11                  the compositing means, for each successively selected layer, composites  
12                  the color value of the layer pixel with the second accumulator  
13                  color value and stores the result in the accumulator accumulat-  
14                  ing means; and

15                  the output means outputs the second accumulator color value.

1        54. (Original) The system of claim 43, wherein each layer comprises a win-  
2        dow, and wherein the image comprises a display for a windowing system.

1        55. (Original) The system of claim 43, wherein a first one of the layers in the  
2        set overlaps a second one of the layers in the set, and wherein each layer comprises  
3        bounds defined by edges, and wherein at least one edge of the first layer lies within  
4        the bounds of the second layer, and wherein the tile subdividing means comprises:  
5                means for subdividing the second layer along a line corresponding to  
6                an extension of the at least one edge of the first layer that lies  
7                within the bounds of the second layer.

1        56. (Currently Amended) The system of claim 43, wherein [[:]]  
2                ~~the layer selecting means successively selects each of at least a subset of~~  
3                ~~the layers in the set of at least two layers, each selected layer~~  
4                ~~having a layer pixel corresponding to the image pixel, the layer~~  
5                ~~pixel having a color value and an alpha value; and~~  
6        the compositing means composites the color value of the layer pixel with the accu-  
7        mulator color value, using the alpha value using at least one of the opacity value of  
8                the layer pixel, the fade value of the selected layer and the accumulator opacity  
9                value.

1        57. (Currently Amended) In an image containing a plurality of layers,  
2        wherein a first one of the layers overlaps a second one of the layers, and wherein

3 each layer comprises bounds defined by edges, and wherein at least one edge of the  
4 first layer lies within the bounds of the second layer, a method of subdividing tiles,  
5 comprising:

6 subdividing the second layer along a straight line corresponding to an  
7 extension of the at least one edge of the first layer that lies within  
8 the bounds of the second layer, to obtain two tile subdivisions;

9 and

10 storing, in a tile list, a representation of at least a subset of the obtained  
11 tile subdivisions;

12 wherein, for each tile, the set of layers that overlap within the tile is  
13 homogenous throughout the entirety of the tile and wherein at  
14 least one of the plurality of layers has a fade value that specifies  
15 an overall opacity of the at least one of the plurality of layers.

1 58. (Original) The method of claim 57, further comprising:

2 repeating the subdividing step using at least one of the obtained tile  
3 subdivisions.

1 59. (Original) The method of claim 57, further comprising:

2 joining at least two adjacent tile subdivisions in the tile list.

1 60. (Original) The method of claim 57, further comprising:

2 responsive to at least two adjacent tile subdivisions including portions  
3 of the same set of identical layers as one another, joining the at  
4 least two adjacent tile subdivisions in the tile list.

1 (61) (Currently Amended) In a device containing an image having a plurality  
2 of layers, wherein a first one of the layers overlaps a second one of the layers, and  
3 wherein each layer comprises bounds defined by edges, and wherein at least one  
4 edge of the first layer lies within the bounds of the second layer, a system for subdi-  
5 viding tiles, comprising:

6 a tile subdivider, for subdividing the second layer along a straight line  
7 corresponding to an extension of the at least one edge of the first  
8 layer that lies within the bounds of the second layer, to obtain  
9 two tile subdivisions; and  
10 a tile list, coupled to the tile subdivider, for storing a representation of  
11 at least a subset of the obtained tile subdivisions;  
12 wherein, for each tile, the set of layers that overlap within the tile is  
13 homogenous throughout the entirety of the tile and wherein at  
14 least one of the plurality of layers has a fade value that specifies  
15 an overall opacity of the at least one of the plurality of layers.

1 62. (Original) The system of claim 61, wherein:  
2 the tile subdivider repeats the subdividing using at least one of the ob-  
3 tained tile subdivisions.

1           63. (Original) The system of claim 61, further comprising:  
2                   a tile joiner, coupled to the tile list, for joining at least two adjacent tile  
3                           subdivisions in the tile list.

1           64. (Original) The system of claim 61, further comprising:  
2                   a tile joiner, coupled to the tile list, for, responsive to at least two adja-  
3                           cent tile subdivisions including portions of the same set of iden-  
4                           tical layers as one another, joining the at least two adjacent tile  
5                                   subdivisions in the tile list.

1           65. (Currently Amended) A computer program product comprising a com-  
2                   puter-usable medium having computer-readable code embodied therein for subdi-  
3                           viding tiles in an image containing a plurality of layers, wherein a first one of the  
4                           layers overlaps a second one of the layers, and wherein each layer comprises bounds  
5                           defined by edges, and wherein at least one edge of the first layer lies within the  
6                           bounds of the second layer, comprising:  
7                           computer-readable program code devices configured to cause a com-  
8                           puter to subdivide the second layer along a straight line corre-  
9                                   sponding to an extension of the at least one edge of the first layer  
10                                   that lies within the bounds of the second layer, to obtain two tile  
11   subdivisions; and

12 computer-readable program code devices configured to cause a com-  
13 puter to store, in a tile list, a representation of at least a subset of  
14 the obtained tile subdivisions;  
15 wherein, for each tile, the set of layers that overlap within the tile is  
16 homogenous throughout the entirety of the tile and wherein at  
17 least one of the plurality of layers has a fade value that specifies  
18 an overall opacity of the at least one of the plurality of layers.

1 66. (Original) The computer program product of claim 65, further compris-  
2 ing:

3 computer-readable program code devices configured to cause a com-  
4 puter to repeat the subdividing using at least one of the obtained  
5 tile subdivisions.

1 67. (Original) The computer program product of claim 65, further compris-  
2 ing:

3 computer-readable program code devices configured to cause a com-  
4 puter to join at least two adjacent tile subdivisions in the tile list.

1 68. (Original) The computer program product of claim 65, further compris-  
2 ing:

3 computer-readable program code devices configured to cause a com-  
4 puter to, responsive to at least two adjacent tile subdivisions in-  
5 cluding portions of the same set of identical layers as one an-

6 other, join the at least two adjacent tile subdivisions in the tile  
7 list.

1 69. (Currently Amended) In a device containing an image having a plurality  
2 of layers, wherein a first one of the layers overlaps a second one of the layers, and  
3 wherein each layer comprises bounds defined by edges, and wherein at least one  
4 edge of the first layer lies within the bounds of the second layer, a system for subdi-  
5 viding tiles, comprising:

6 tile subdividing means, for subdividing the second layer along a  
7 straight line corresponding to an extension of the at least one  
8 edge of the first layer that lies within the bounds of the second  
9 layer, to obtain two tile subdivisions; and  
10 tile list storage means, coupled to the tile subdividing means, for stor-  
11 ing a representation of at least a subset of the obtained tile sub-  
12 divisions;

13 wherein, for each tile, the set of layers that overlap within the tile is  
14 homogenous throughout the entirety of the tile and wherein at  
15 least one of the plurality of layers has a fade value that specifies  
16 an overall opacity of the at least one of the plurality of layers.

1 70. (Original) The system of claim 69, wherein:  
2 the tile subdividing means repeats the subdividing using at least one of  
3 the obtained tile subdivisions.

1        71. (Original) The system of claim 69, further comprising:  
2                tile joining means, coupled to the tile list storage means, for joining at  
3                least two adjacent tile subdivisions in the tile list.

1        72. (Original) The system of claim 69, further comprising:  
2                tile joining means, coupled to the tile list storage means, for, responsive  
3                to at least two adjacent tile subdivisions including portions of  
4                the same set of identical layers as one another, joining the at least  
5                two adjacent tile subdivisions in the tile list.